

DEVAL L. PATRICK GOVERNOR TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD SECRETARY

JOHN AUERBACH COMMISSIONER

# The Commonwealth of Massachusetts

Executive Office of Health and Human Services
Department of Public Health
William A. Hinton State Laboratory Institute
305 South Street, Jamaica Plain, MA 02130

01/26/2012

Larry Bates Assistant District Attorney, Suffolk County

Dear ADA Bates,

Enclosed is the information you requested in regards to Commonwealth vs. Included are copies of the following:

- .
- 1. Curriculum Vitae for Annie Dookhan and Kate Corbett.
- 2. Drug Analysis Laboratory Receipt.
- 3. Control Cards with analytical results for samples #
- 4. Analysis sheets with custodial chemist's hand notations and test results.
- 5. GC/Mass Spectral analytical data for samples #

Annie Dookhan was the custodial chemist and performed the preliminary testing and net weight for this sample. Kate Corbett analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Sincerely,

Annie Dookhan

Chemist

Drug Analysis Lab

Jamaica Plain, MA. 02130

(617) 983-6622

## Khan, Annie (DPH)

From:

Khan, Annie (DPH)

Sent:

Thursday, January 12, 2012 12:12 PM

To:

Bates, Larry (SUF); Corbett, Kate (DPH)

Subject: RE: Lab Notes and Summons BMC Docket Number

Hi Larry,

Hope this email finds you well.

Upon reviewing this case, the Lab#s may be incorrect.

At your convenience, could you please check if these are the correct Lab#s?

Sorry for the inconvenience.

Thanks.

Annie Drug Analysis Lab 617-983-6622 (work) 617-983-6625 (fax)

From: Bates, Larry (SUF)

Sent: Wednesday, January 11, 2012 2:58 PM To: Khan, Annie (DPH); Corbett, Kate (DPH)

Subject: Lab Notes and Summons BMC Docket Number

Process of

Lab#

**Greetings Once More** 

Attached please find a summons for your appearance on the above given case at BMC for Feb 15. Request is also made for you forward a copy of lab notes for case numbe and should you not be able to attend the court date, please notify me. Lastly, thank you for your assistance.

Larry Bates

#### Curriculum Vitae

#### Annie Khan (Dookhan)

#### Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry

University of Massachusetts, Boston, Ma, Bachelor of Science

Major: Biochemistry Minor: Economics

#### Experience:

2003 - present

#### Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- \*Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.
- \*Writing of the Standard Operating Procedures (SOPs) and Protocols.
- \*Responsible for the Quality Control and Quality Assurance of analytical instruments, reagents and controls/standards.
- \*Maintenance and repairs of analytical instruments.
- \*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- \*Qualified as an expert witness in Massachusetts Courts and U.S. District Court.
- \*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- \*Appointed Assistant Analyst by Assistant Commissioner of Public Health.
- \*Notary Public.

2001 - 2003

#### QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- \*Completed proficiency training conducted by a member of the staff within the MBL Quality Control and Quality Assurance Department for the Food and Drug Administration.
- \*Method Development for creating new techniques for the QC Dept. and FDA.
- \*Writing, revising and reviewing the Standard Operating Procedures (SOPs).
- \*Trained and supervised new chemists and interns for the department.
- \*Routine QC testing of products for the FDA.
- \*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- \*Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- \*Complete testing of chemicals for Vendor Validation Project for the FDA.
- \*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

#### **Additional Courses:**

## **Department of Justice - Forensics Professionals**

Introduction to Forensic Drug Chemistry

Chemical Spot Test and Mechanism for Illicit Drugs

Forensic Mass Spectrometry

Forensic Science 101: An Introduction

Fundamentals of Forensic Questioned Documents

Perspectives in Expert Testimony

**Evidence Analysis** 

Ethics in Forensic Science

Transition to Leadership

Fundamentals of Forensic Toxicology

### Additional Trainings:

Good Laboratory Practice/Good Manufacturing Practice (GLP/GMP) training with Massachusetts Biologic Laboratory.

Quality Control/Quality Assurance (QC/QA) training according to FDA Codes and Regulations.

Gas Chromatography (GC) and Gas Chromatography/Mass Spectrometry (GC/MS) trainings with Agilent Technologies and Restek.

High Power Liquid Chromatography (HPLC) and HPLC/MS/MS trainings with Waters Cooperation.

Fourier Transform Infrared Spectroscopy (FTIR) training with Spectros and Spectum One.

Ultraviolet-Visible Spectroscopy (UV-Vis) training with Agilent Technologies and Beckman.

Total Organic Carbon Analyzer (TOC) training with MBL and Sievers.

### Associations:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

## Curriculum Vitae

### Kate A. Corbett

## Education

## Bachelor of Science Degree, CHEMISTRY May 2003 MERRIMACK COLLEGE

Coursework included: Organic Chemistry, Inorganic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus

## **Employment**

Chemist II State Laboratory Institute (March 2008-Present)

Massachusetts Department of Public Health

**Drug Analysis Laboratory** 

- Responsible for the identification of substance and trafficking substances to determine violation of the Massachusetts drug laws
- Responsible for the identification of pharmaceuticals to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation, microscopes and balances for forensic drug analysis

### Chemist I State Laboratory Institute (2005-March 2008)

Massachusetts Department of Public Health

**Drug Analysis Laboratory** 

- Responsible for the identification of substance to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation for the purpose of performing forensic drug analysis
- Successfully completed an eight week training course in the analysis of drugs conducted by senior staff of the Department of Public Health, Drug Analysis Laboratory
- Appointed an assistant analyst for the Department of Public Health, Drug Analysis Laboratory in 2005.

#### Research Associate (September 2003 – August 2005)

SENSOR TECHNOLOGIES, INC - Shrewsbury, MA

- Prepared chemistries used in making sensor beads
- Generated and examined sensors employing fluorescence spectroscopy
- Performed protein, dye and sugar assays using UV/VIS spectrophotometry
- Carried out titrations on ricin using fluorescence correlation spectroscopy
- Statistical analysis of experimental data

## Intern (March 2003 – August 2003)

MASSACHUSETTS STATE POLICE CRIME LABORATORY - Sudbury, MA

- Assisted in the gathering of case files to fulfill the National Institute of Justice's No Suspect Backlog Reduction Grant
- Observed in the Evidence, Criminalistics, DNA, Drug, Trace, Toxicology, and Bomb/Arson Units

Bosia		E	9	Ó	A R	ı T	M	Ç	N N	
DRUG RECEIP	T									

2oskom2olice	cc #		·				
DEPARIMENT	воок#67						
	PAGE #						
	DESTRUCTION #		4.1004. 11				
Name & Rank of Arresting Officer 591. Det.	Leenan	ID# 1068	2_				
DEFENDANT'S NAME	ADDRESS	CITY	STATE				
				٠			
		LAB US	E ONLY				
DESCRIPTION OF ITEMS SUBMITTED	GROSS QUANTITY	GROSS WEIGHT	ANALYSIS NUMBER				
hite rock (crack cocnine)	2 plus	4,300					
hite pills (800 mg Gasapentin)	40 pills	20,290					
in powder (Heroin)	46 G/B'S	57.89					
-			*				
To be completed by ECU personnel only							
Name and Rank of Submitting Officer	While	ID#//0,	Ğ.				
Received by			3-11				
<u> </u>		ECU Control #					

Date Analyzed: < City: Boston D.C.U. Police Dept. Officer: P.O. SYBIL WHITE Def: Subst: SUB Amount: No. Cont: Cont: pb 2 No. Analyzed: \ Date Rec'd: 02/03/2011 Net Weight: 0 · 16 4.36 Gross Wt.: #Tests: 6 ASD Findings: Prelim: cocure &

Date Analyzed: 03-26-11 City: Boston D.C.U. Police Dept. Officer: P.O. SYBIL WHITE Def: Amount: 40.0 Subst: TAB No. Cont: 1 Cont: pb Date Rec'd: 02/03/2011 No. Analyzed: Gross Wt.: 20.29 Net Weight: #Tests: \AT

Date Analyzed: City: Boston D.C.U. Police Dept.

Officer: P.O. SYBIL WHITE

Def:

Amount:

Gross Wt.:

Prelim: &

Cont: gb

No. Cont: 46

Date Rec'd: 02/03/2011

57.89

No. Analyzed: 5

Net Weight: 0.86

Subst: SUB

# Tests: 25 AS D

Findings: optoages to

Prelim: Heron

## DRUG POWDER ANALYSIS FORM

SAMPLE#	AGENCY BOE	ANALYST	AZI
No. of samples tested:	-	Evidence Wt.	
PHYSICAL DESCRIPTION:		Gross Wt(2):	0.3721
Off white chu	ILL BUSGTOSCO	_ Gross Wt (	0.2126
	1 2602		797FC2000FCF752500000000000000000000000000000000000
		Net Wt:	0.1640
		,	
	•		
PRELIMINARY TESTS Spot Tests		Microcrystalline Tes	its
Cobalt		Gold	-
Thiocyanate ( —) +	-	Chloride 4	name-transministration and the contract of the
Marquis	-	TLTA (-) +	* <i>@</i>
Froehde's		OTHER TESTS	•
Mecke's			annumentum menter bibli-byra rium ar unak
			-pk
			00000.000.0000000000000000000000000000
PRELIMINARY TEST RESULTS		GC/MS CONFIRMATORY	TEST
RESULTS COCANO		RESULTS COCCURE	
DATE 2-8-11	· ·	MS OPERATOR KAC	
		DATE 2-10-11	

## DRUG POWDER ANALYSIS FORM

SAMPLE AGE	ENCY BOSEO. ANALYST AND
No. of samples tested:	Evidence Wt.
PHYSICAL DESCRIPTION:	Gross Wt( ):
40 while ood	21 -100/et Gross Wt ( ):
17 16	Pkg. Wt:
	Net Wt: 51.2238
ष्ट्रपप्पप 80	50
PRELIMINARY TESTS Spot Tests	Microcrystalline Tests
Cobalt Thiocyanate ()	Gold Chloride
Marquis	TLTA ( )
Froehde's	OTHER TESTS
Mecke's	Marmar 9 (F)
·	
PRELIMINARY TEST RESULTS	GC/MS CONFIRMATORY TEST
RESULTS GLOBA RECORD	RESULTS
DATE 3.26-11	MS OPERATOR
	DATE

# **Drug Information**

DRUG NAME: GABAPENTIN

**INGREDIENTS: GABAPENTIN -- 800 MG** 

Color: White Shape: Oval

imprint: 4444 The tablet is debossed with a hourglass logo and 4444 on one side and 800 on the reverse side., Hourglass 4444 800 The tablet is debossed with a hourglass logo and 4444 on one side and 800 on the

reverse side., 800 Form: Oral Tablet

Available-Container-Size: Bottle of 100, Bottle of 500, Strip of 100, Bottle

of 1000

AAPCC Code: 077730 - Other Types

of Anticonvulsant (Excluding

Barbiturates)

NDC: 0093-4444-01 0093-4444-05 0172-4444-60 0172-4444-70 0172-4444-10

Excipients: Lactose (Monohydrate); Cellulose,

Microcrystalline ; Polyethylene Glycol

Regulatory Status: RX
Availability: United States

Product ID 6738350

Contact: Teva Pharmaceuticals

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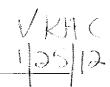
# DRUG POWDER ANALYSIS FORM

SAMPLE #	IGENCY BOBRO	ANALYST	420
No. of samples tested: 5	-	Evidence Wt.	<u></u>
PHYSICAL DESCRIPTION:		Gross Wt (45):	9.7000
Beige powdred	substan e	Gross Wt (5):	1-0902
	200 011	Pkg. Wt:	
	_	Net Wt:	
, do subsit.	> not weighted.		
		•	
PRELIMINARY TESTS			
Spot Tests		Microcrystalline Tes	<u>its</u>
Cobalt ≤ Thiocyanate ( →)	Ch	Gold loride	
< Marquis +			
5 Froehde's +		OTHER TESTS	
S Mecke's	<b>5</b> G-	C-+	-
	***************************************	,	900000000041-b-0/-o-b
		Market	-
PRELIMINARY TEST RESULTS	<u>GC/N</u>	IS CONFIRMATORY	TEST
RESULTS LENOUS	RESU	ILTS <u>Henov</u>	<u> </u>
DATE 2-08-11		MS	
		TOR 1CAC	november of the second
	D	ATE 2-16-19	1

# samples tested: 5

#	Gross Welght	Packet Weight	Net Weight	#	Gross Weight	Packet Weight	Net Welght
1	0.2187	0.1957	@.0180	26			
2	0.2143	0.2007	0.0136	27			
3	0.2164	0.1989	0.0175	28		4	
4	0.2311	0.2021	0.0290	29			,
5	0.2227	0.2063	0.6164	30			
6				31			
7				32			-
8				33		Audilla	
9	250000000000000000000000000000000000000		110000000000000000000000000000000000000	34			
10			† / 1100-10000000000000000000000000000000	35			
11			***************************************	36			
12				37	~~~~~~		
13				38			
14			MANAGA ANG ANG ANG ANG ANG ANG ANG ANG AN	39	911111111111111111111111111111111111111		
15				40			_
16				41	no (no constitutivo de la constitutiva de la constitutiva de la constitutiva de la constitutiva de la constitu		
17				42		,	
18			77.41.110.000	43			
19				44	**************************************		
20				45			
21		·		46			
22			PA	47		-	
23			7,511	48	COCCOCCIA di La gia concoccoccia alcono.		1000
24				49			3333334
25 Calcul	Section 11 - 11 - 11 - 11 - 11 - 11 - 11 - 11			50	2004-04-04-04-04-04-04-04-04-04-04-04-04-		

Calculations:



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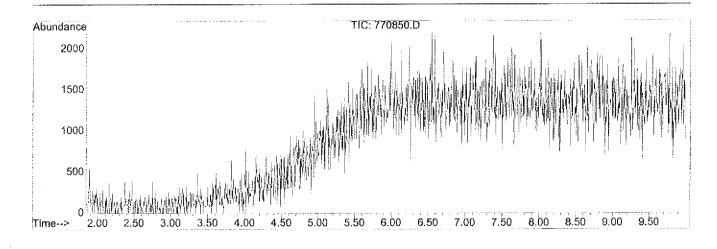
Operator : SLD

Date Acquired : 9 Feb 2011 21:22

Sample Name : BLANK

Submitted by :

Vial Number : 1
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time Area Area % Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

File Name : D:\SYSTEM4\02 09 11\770851.D

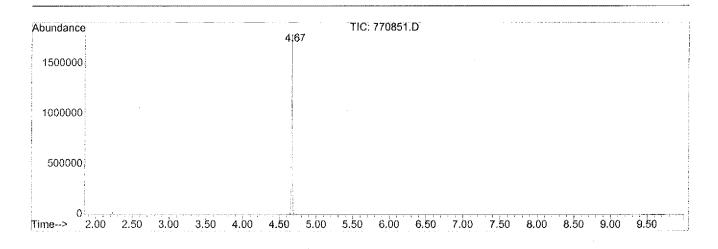
Operator : SLD

Date Acquired : 9 Feb 2011 21:35

Sample Name : COCAINE STD

Submitted by

Vial Number 51 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.666	1636731	100.00	100.00

File Name : D:\SYSTEM4\02 09 11\770851.D

Operator : SLD

Date Acquired : 9 Feb 2011 21:35

Sample Name : COCAINE STD

Submitted by :

Vial Number : 51 AcquisitionMeth: DRUGS Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

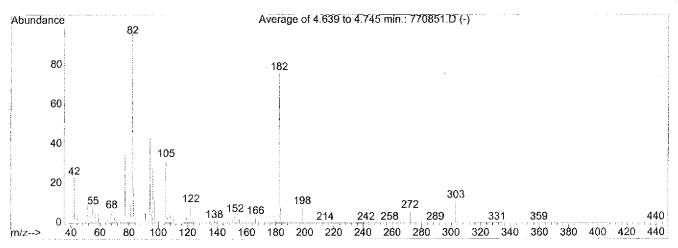
Minimum Quality: 90

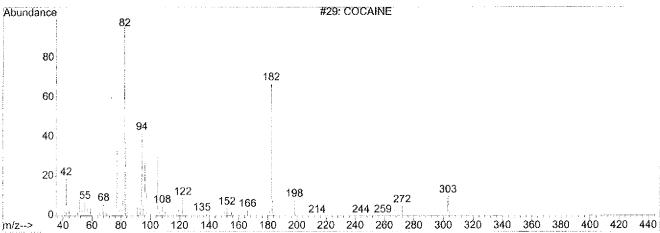
C:\DATABASE\PMW\_TOX2.L

Minimum Quality: 90

 $C: \Delta TABASE NIST98.L$ 

PK#	RT	Library/ID	CAS#	Qual
1	4.67	C:\DATABASE\SLI.L COCAINE	000050-36-2	99





770851.D

Wed Jan 25 11:21:05 2012

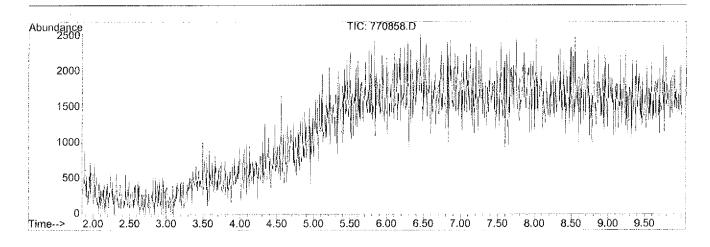
Page 2

File Name : D:\SYSTEM4\02\_09\_11\770858.D

Operator : SLD

Date Acquired : 9 Feb 2011 23:12

Sample Name : BLANK Submitted by : ASD Vial Number : 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area & Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

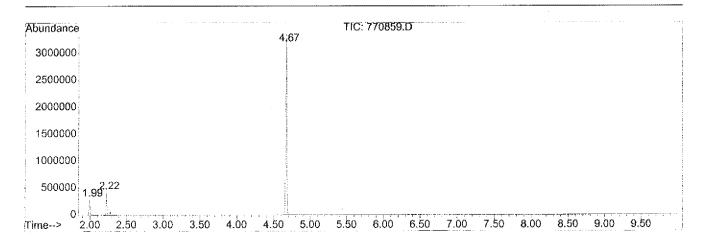
File Name : D:\SYSTEM4\02\_09\_11\770859.D

Operator : SLD

Date Acquired : 9 Feb 2011 23:26

Sample Name

Submitted by : ASD Vial Number : 59 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
1.992	295989	6.99	8.31	
2.225	372895	8.81	10.46	
4.668	3563840	84.20	100.00	

File Name : D:\SYSTEM4\02 09 11\770859.D

Operator : SLD

Date Acquired : 9 Feb 2011 23:26

Sample Name Submitted by

Submitted by : ASD
Vial Number : 59
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

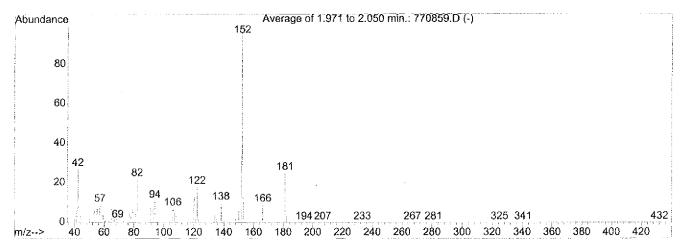
Minimum Quality: 90

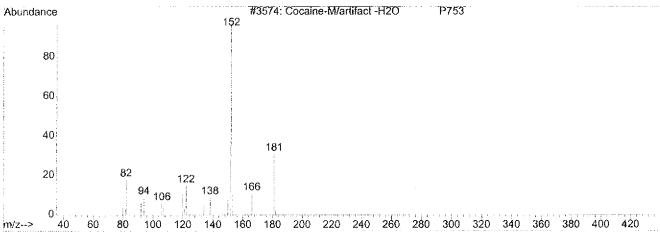
C:\DATABASE\PMW\_TOX2.L

Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID		CAS#	Qual
 1	1.99	C:\DATABASE\PMW_TOX2.L Cocaine-M/artifact -H2O		000000-00-0	96
		MDA-M (desmethylenyl-methyl-)	ME	@ 000000-00-0	37
		Metipranolol-M/artifact AC		000000-00-0	32





770859.D

Wed Jan 25 11:21:20 2012

Page 2

File Name : D:\SYSTEM4\02 09 11\770859.D

Operator : SLD

Date Acquired : 9 Feb 2011 23:26

Sample Name Submitted by

Vial Number : 59
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

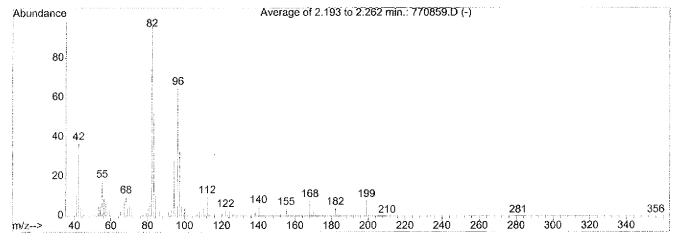
Minimum Quality: 90

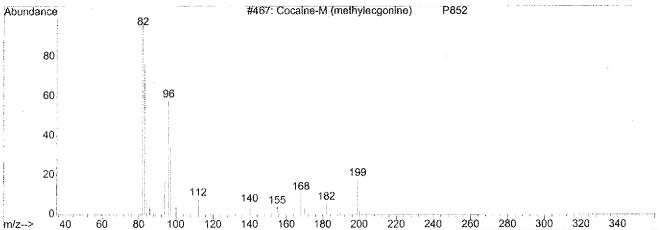
C:\DATABASE\PMW\_TOX2.L

Minimum Quality: 90

C:\DATABASE\NIST98.L

PK# RT	Library/ID	CAS#	Qual
2 2.22	C:\DATABASE\PMW_TOX2.L Cocaine-M (methylecgonine)	007143-09-1	96
	Cocaine M (methylecgonine) AC Cocaine-M (methylecgonine) AC	000050-36-2	38





770859.D

Wed Jan 25 11:21:21 2012

Page 3

File Name : D:\SYSTEM4\02 09 11\770859.D

Operator : SLD

Date Acquired : 9 Feb 2011 23:26

Sample Name Submitted by

Vial Number : 59
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

122

135

152 166

Minimum Quality: 90

C:\DATABASE\PMW TOX2.L

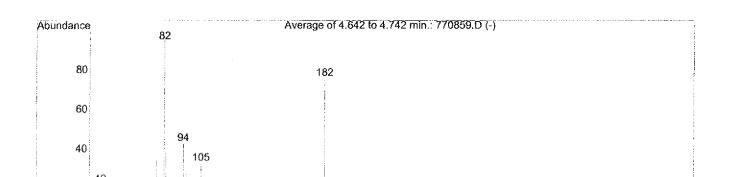
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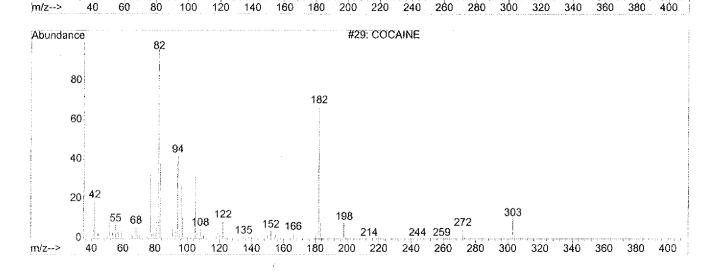
PK# RT Library/ID CAS# Qual

3 4.67 C:\DATABASE\SLI.L

COCAINE 000050-36-2 99



210 222



770859.D

20

0

<sup>55</sup> 68

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Wed Jan 25 11:21:22 2012

Page 4

303

327

355

291

272

242 257

405

File Name : D:\SYSTEM4\02\_09\_11\770862.D

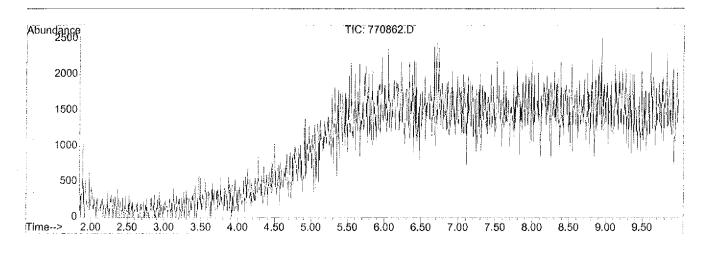
Operator : SLD

Date Acquired : 10 Feb 2011 00:07

Sample Name : BLANK

Submitted by

Vial Number 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

File Name : D:\SYSTEM4\02\_09\_11\770863.D

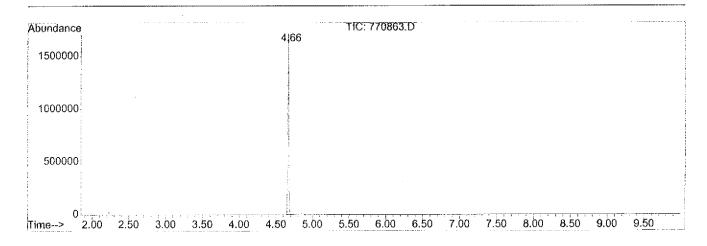
Operator : SLD

Date Acquired : 10 Feb 2011 00:21

Sample Name : COCAINE STD

Submitted by

Vial Number 51 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.663	1728398	100.00	100.00

File Name : D:\SYSTEM4\02 09 11\770863.D

Operator : SLD

Date Acquired : 10 Feb 2011 00:21

Sample Name

COCAINE STD

Submitted by

Vial Number 51 AcquisitionMeth: DRUGS : RTE Integrator

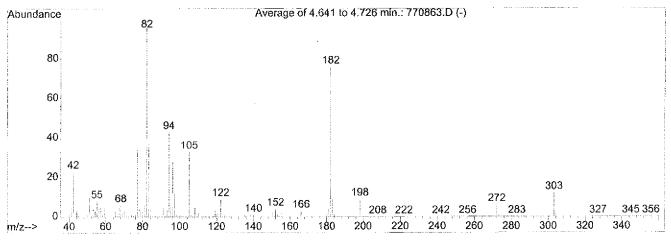
Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90

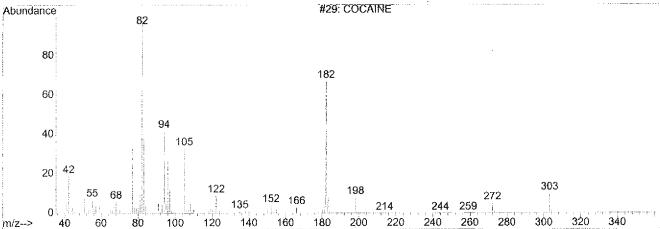
C:\DATABASE\PMW\_TOX2.L

Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
1	4.66	C:\DATABASE\SLI.L COCAINE	000050-36-2	99





770863.D

Wed Jan 25 11:21:34 2012

2 Page

#### Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q1-2011\System7\02\_15\_11\771904.D

Operator : KAC

Date Acquired : 15 Feb 2011 9:25

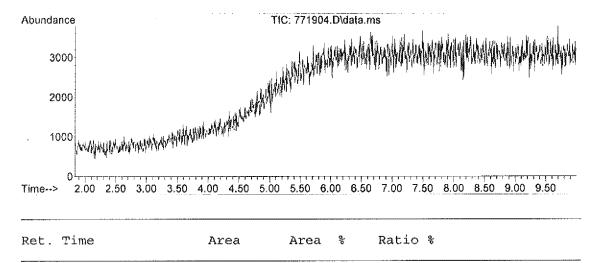
Sample Name : BLANK

Submitted by

Vial Number ; 1

AcquisitionMeth: DRUGS.M

Integrator : RTE



\*\*\*NO INTEGRATED PEAKS\*\*\*

File Name : F:\Q1-2011\System7\02\_15\_11\771905.D

Operator : KAC

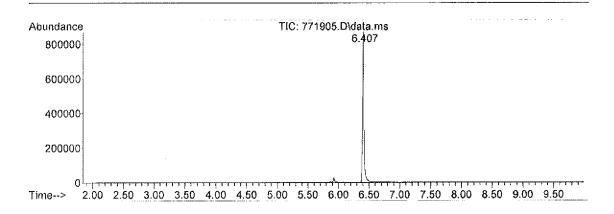
Date Acquired : 15 Feb 2011 9:38

Sample Name : HEROIN STD

Submitted by :

Vial Number : 5 AcquisitionMeth: DRUGS.M

Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.407	1376028	100.00	100.00

File Name : F:\Q1-2011\System7\02\_15\_11\771905.D

Operator : KAC

Date Acquired : 15 Feb 2011 9:38

Sample Name : HEROIN STD

Submitted by

Vial Number

AcquisitionMeth: DRUGS.M : RTE Integrator

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80

C:\Database\PMW TOX2.L

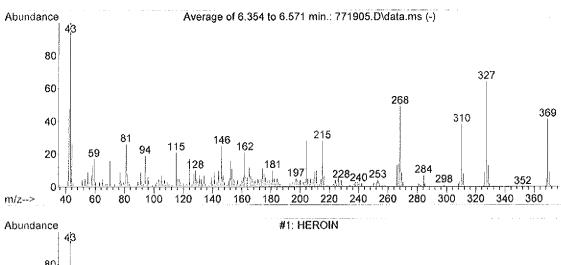
PK# RT CAS# Qual Library/ID

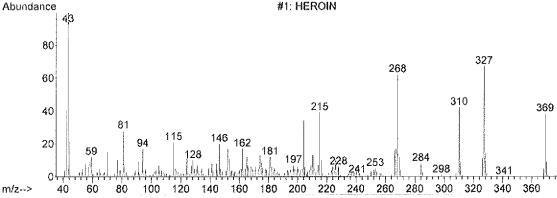
6.41 C:\Database\SLI.L 1

HEROIN

000561-27-3

99



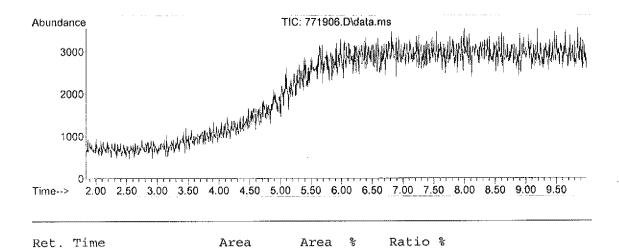


File Name : F:\Q1-2011\System7\02 15 11\771906.D

Operator : KAC

Date Acquired : 15 Feb 2011 9:51

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



\*\*\*NO INTEGRATED PEAKS\*\*\*

File Name : F:\Q1-2011\System7\02\_15\_11\771907.D

Operator : KAC

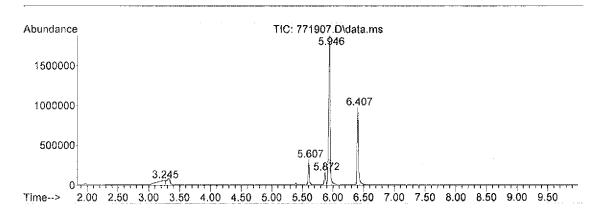
Date Acquired : 15 Feb 2011 10:03

Sample Name :

Submitted by : ASD Vial Number : 7

AcquisitionMeth: DRUGS.M

Integrator : RTE



Ratio %	Area %	Area	Ret. Time
16.45	8.71	512102	3.245
14.15	7.49	440354	5.607
7.95	4.21	247462	5.872
100.00	52.91	3112744	5.946
50.44	26.69	1570135	6,407

File Name : F:\Q1-2011\System7\02\_15\_11\771907.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:03

Sample Name : B11-01290-1

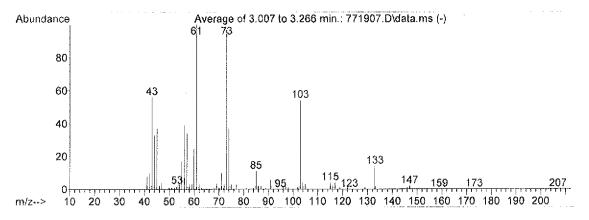
Submitted by : ASD
Vial Number : 7
AcquisitionMeth: DRUGS.M
Integrator : RTE

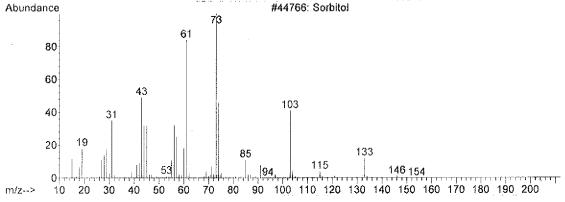
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1.	3.25	C:\Database\NIST05a.L Sorbitol Sorbitol Sorbitol	000050-70-4 000050-70-4 000050-70-4	87 86 80





File Name : F:\Q1-2011\System7\02\_15\_11\771907.D

Operator : KAC

Date Acquired 15 Feb 10:03

Sample Name

Submitted by Vial Number

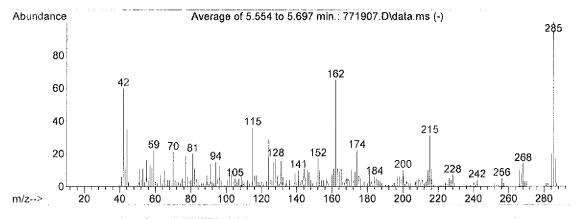
AcquisitionMeth: DRUGS, M Integrator RTE

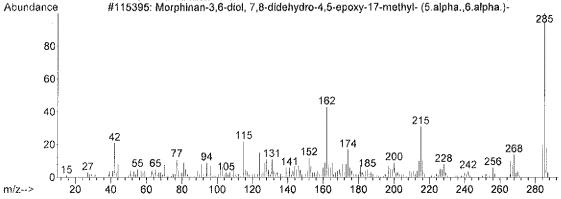
Minimum Quality: 80 Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

PK#	RT	Library/ID		CAS#	Qual
2	5.61	C:\Database\NIST05a.	L		
		Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99
		Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99
		Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99
	PK# 2		2 5.61 C:\Database\NIST05a. Morphinan-3,6-diol, Morphinan-3,6-diol,	2 5.61 C:\Database\NIST05a.L Morphinan-3,6-diol, 7,8-didehydro-4 Morphinan-3,6-diol, 7,8-didehydro-4	





File Name : F:\Q1-2011\System7\02\_15\_11\771907.D

Operator : KAC

RT

Date Acquired : 15 Feb 2011 10:03

Sample Name

PK#

Submitted by : ASD Vial Number : 7 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

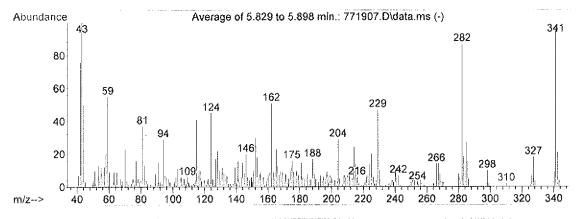
Database\SLI.L Minimum Quality: 80
Database\NIST05a.L Minimum Quality: 80

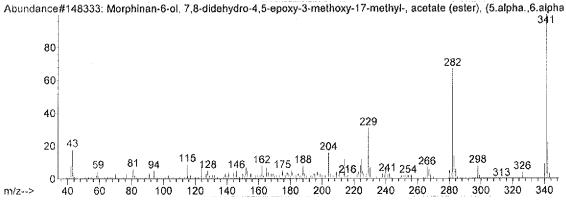
C:\Database\NIST05a.L
C:\Database\PMW TOX2.L

Library/ID CAS# Qual

3 5.87 C:\Database\NIST05a.L

Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 97 Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 97 Morphin, 3-acetyl- 1000153-00-1 92





File Name : F:\Q1-2011\System7\02\_15\_11\771907.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:03

Sample Name :

Submitted by : ASD

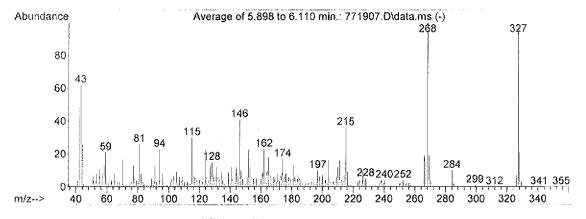
Vial Number : 7 AcquisitionMeth: DRUGS.M Integrator : RTE

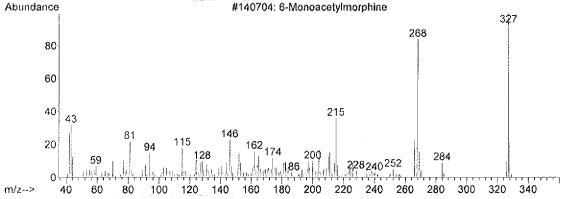
Search Libraries: C:\Database\SLI.L

C:\Database\SLI.L Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW TOX2.L

_	PK#	RT	Library/ID	CAS#	Qual
	4	5.95	C:\Database\NIST05a.L 6-Monoacetylmorphine 6-Monoacetylmorphine	002784-73-8 002784-73-8	99 99
			6-Monoacetylmorphine	002784-73-8	99





File Name : F:\Q1-2011\System7\02\_15\_11\771907.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:03

Sample Name : Submitted by : ASD

Vial Number : 7 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

C:\Database\SLI.L Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

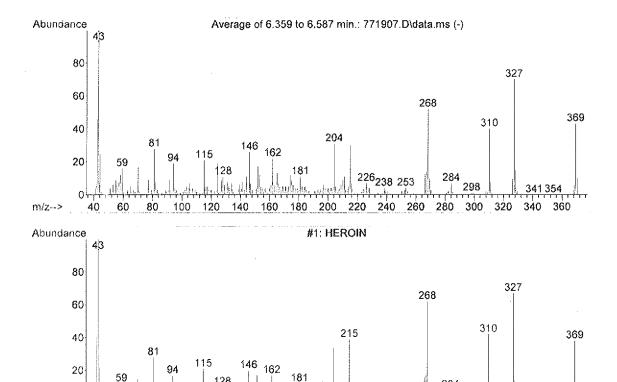
99

C:\Database\PMW TOX2.L

PK# RT Library/ID CAS# Qual

5 6.41 C:\Database\SLI.L

HEROIN 000561-27-3



m/z-->

40

80

100

140

160

180

200

220

298

300 320

340

360

240

260 280

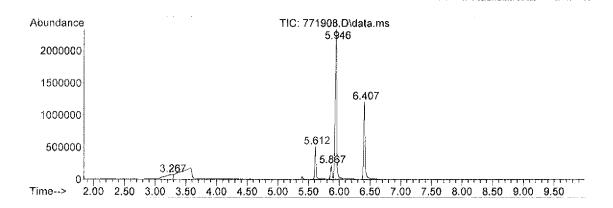
File Name : F:\Q1-2011\System7\02\_15\_11\771908.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:16

Sample Name :

Submitted by : ASD
Vial Number : 8
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
3.267	629037	8.12	15.08	
5.612	699390	9.03	16.76	
5.867	334629	4.32	8.02	
5,946	4172296	53.88	100.00	
6.407	1908470	24.65	45.74	

File Name : F:\Q1-2011\System7\02\_15\_11\771908.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:16

Sample Name :

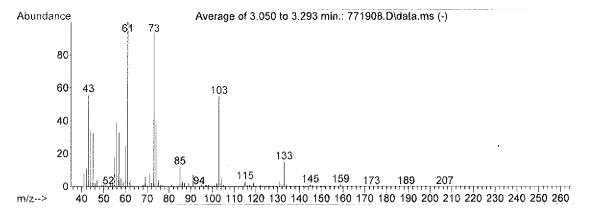
Submitted by : ASD
Vial Number : 8
AcquisitionMeth: DRUGS.M
Integrator : RTE

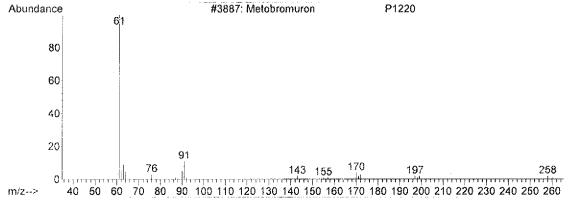
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	3.27	C:\Database\PMW_TOX2.L Metobromuron Myristic acid Monolinuron	003060-89-7 000544-63-8 001746-81-2	4 2 2





File Name : F:\Q1-2011\System7\02\_15\_11\771908.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:16

Sample Name :

: ASD

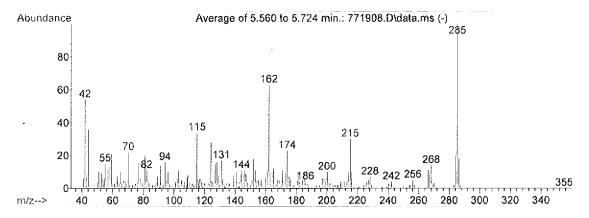
Submitted by : ASD Vial Number : 8 AcquisitionMeth: DRUGS.M Integrator : RTE

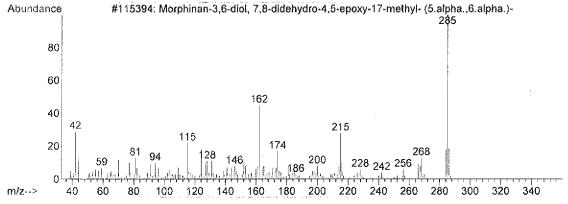
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID		CAS#	Qual
 2	5.61	C:\Database\NIST05a.	L,		
		Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99
		Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99
		Morphinan-3.6-diol.	7.8-didehydro-4	000057-27-2	99





File Name : F:\Q1-2011\System7\02\_15\_11\771908.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:16

Sample Name :

15 Feb 2011 10:1

Submitted by : ASD
Vial Number : 8
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries: C:\Database\SLI.L

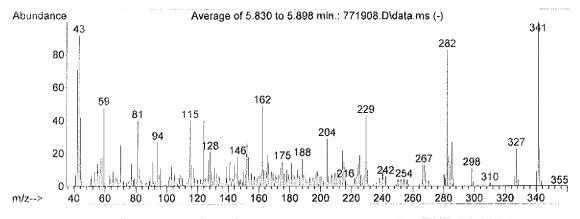
Minimum Quality: 80

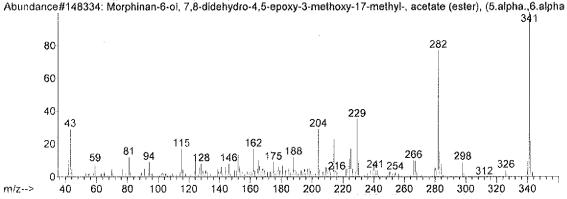
C:\Database\NIST05a.L

Minimum Quality: 80

C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID		CAS#	Qual
3	5.87	C:\Database\NIST	05a.L		
		Morphinan-6-ol,	7,8-didehydro-4,5-e	006703-27-1	99
		Morphinan-6-ol,	7,8-didehydro-4,5-e	006703-27-1	99
		Acetylcodein	_	1000153-00-2	98





File Name : F:\Q1-2011\System7\02\_15\_11\771908.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:16

Sample Name : Submitted by :

ASD 8

Vial Number : 8 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80

002784-73-8

99

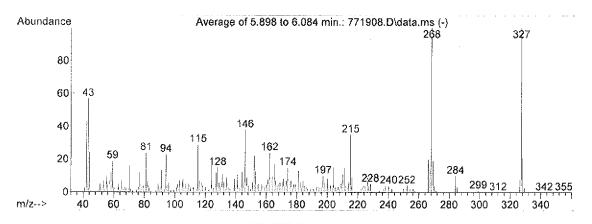
C:\Database\NIST05a.L
C:\Database\PMW TOX2.L

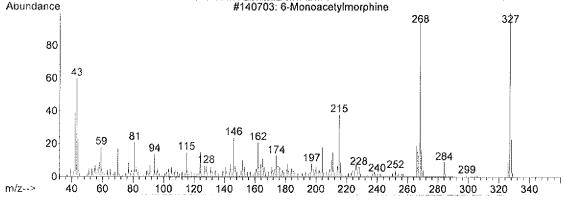
6-Monoacetylmorphine

Minimum Quality: 80

PK# RT Library/ID CAS# Qual

4 5.95 C:\Database\NIST05a.L
6-Monoacetylmorphine 002784-73-8 99
6-Monoacetylmorphine 002784-73-8 99





File Name : F:\Q1-2011\System7\02\_15\_11\771908.D

Operator : KAC

Date Acquired 15 Feb 2011 10:16

Sample Name Submitted by

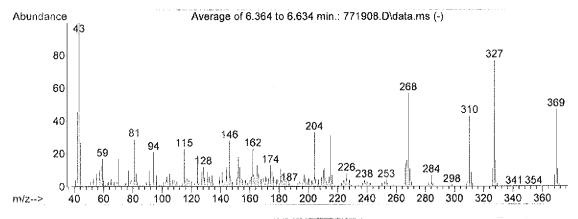
ASD Vial Number AcquisitionMeth: DRUGS.M Integrator : RTE

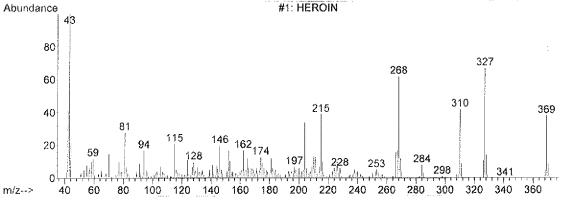
Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

PK#	RT	Library/ID	CAS#	Qual
5	6.41	C:\Database\SLI.L		
		HEROIN	000561-27-3	99
		JWH-073	208987-48-8	2





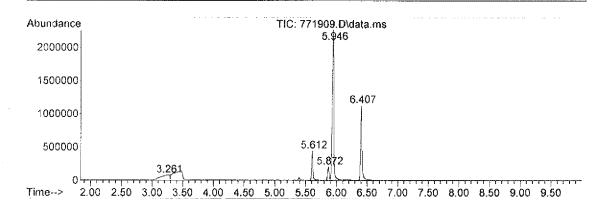
File Name : F:\Q1-2011\System7\02\_15\_11\771909.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:28
Sample Name :

Submitted by : ASD Vial Number : 9

AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
3.261	724023	9.61	18.01	
5,613	634422	8.42	15,78	
5.872	325760	4.32	8.10	
5.946	4020959	53.36	100.00	
6.407	1830160	24,29	45.52	

File Name : F:\Q1-2011\System7\02\_15\_11\771909.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:28

Sample Name :

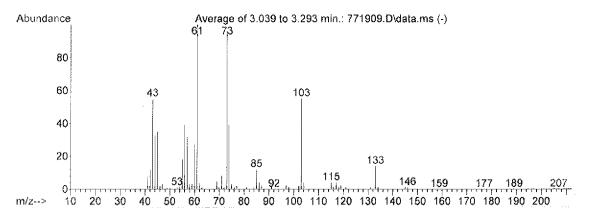
Submitted by : ASD Vial Number : 9

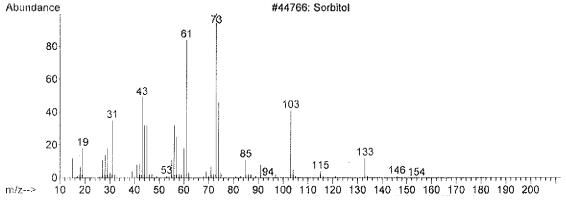
AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

C:\Database\SLI.L Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

PK#	RT	Library/ID	CAS#	Qual
1	3.26	C:\Database\NIST05a.L	000050 70 4	0.77
		Sorbitol D-Mannitol	000050-70-4 000069-65-8	87 78
		Sorbitol	000050-70-4	64





File Name : F:\Q1-2011\System7\02\_15\_11\771909.D

Operator : KAC

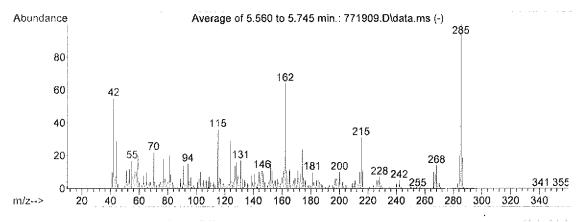
Date Acquired : 15 Feb 2011 10:28
Sample Name :
Submitted by : 755

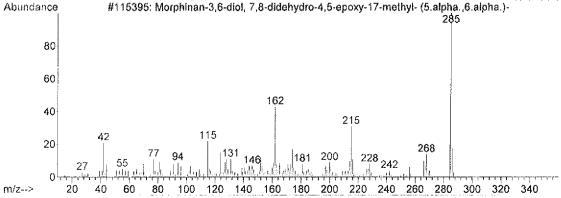
Vial Number : 9
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

PK#	RT	Library/ID		CAS#	Qual
 2	5.61	C:\Database\NIST05a.	L		
		Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99
		Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99
		Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99





File Name : F:\Q1-2011\System7\02\_15\_11\771909.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:28

Sample Name : Submitted by : As Vial Number :

ASD 9

AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW\_TOX2.L

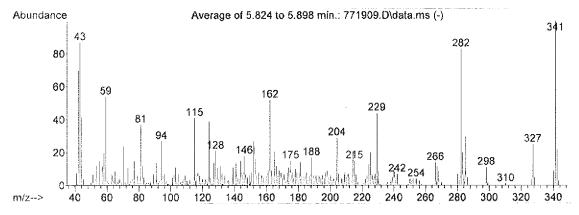
PK# RT Library/ID CAS# Qual

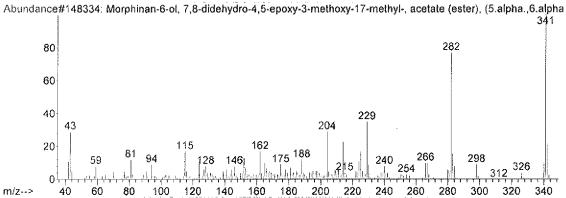
3 5.87 C:\Database\NIST05a.L

Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 99

Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 99

Acetylcodein 1000153-00-2 95





File Name : F:\Q1-2011\System7\02\_15\_11\771909.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:28

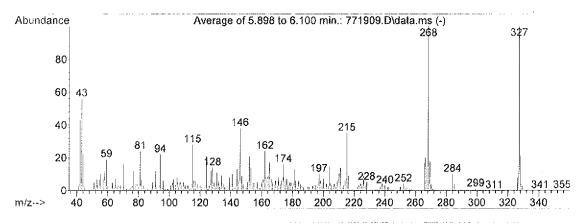
Sample Name :

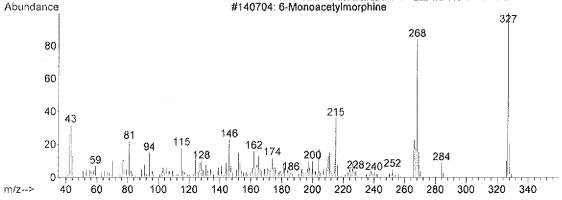
Submitted by : ASD
Vial Number : 9
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

 PK#	RT	Library/ID	CAS#	Qual
4	5.95	C:\Database\NIST05a.L 6-Monoacetylmorphine	002784-73-8	99
		6-Monoacetylmorphine	002784-73-8	99
		6-Monoacetylmorphine	002784-73-8	99





File Name : F:\Q1-2011\System7\02\_15\_11\771909.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:28

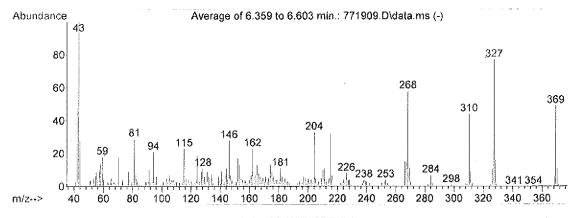
Sample Name : Submitted by : ASD

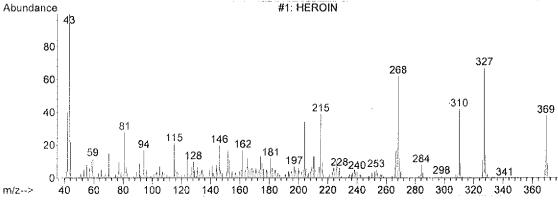
Vial Number : 9
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

PK#	RT	Library/ID	CAS#	Qual
5	6.41	C:\Database\SLI.L		
		HEROIN	000561-27-3	99
		JWH-073	208987-48-8	2





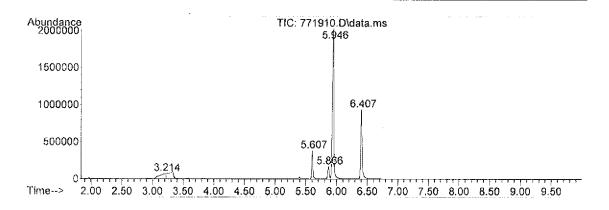
File Name : F:\Q1-2011\System7\02\_15\_11\771910.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:41

Sample Name

Submitted by : ASD
Vial Number : 10
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
3,214	497068	7.96	14.52	
5.607	526511	8.43	15.38	
5.866	266490	4.27	7.79	
5.946	3422257	54.80	100.00	
6,407	1532774	24.54	44.79	

File Name : F:\Q1-2011\System7\02\_15\_11\771910.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:41

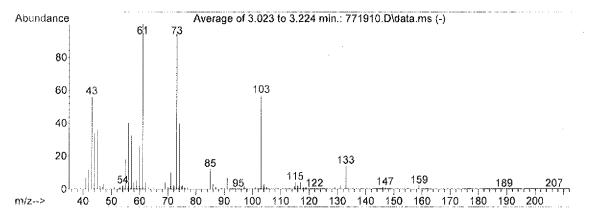
Sample Name
Submitted by
Vial Number : 10

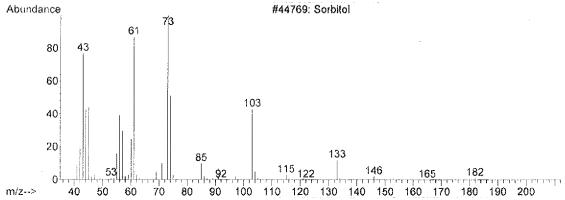
AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

 PK#	RT	Library/ID	CAS#	Qual
1	3.21	C:\Database\NIST05a.L Sorbitol	000050-70-4	80
		Sorbitol	000050-70-4	72
		Sorbitol	000050-70-4	72





File Name : F:\Q1-2011\System7\02\_15\_11\771910.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:41

Sample Name

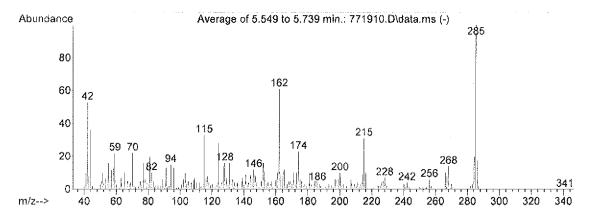
Submitted by Vial Number 10 AcquisitionMeth: DRUGS.M Integrator : RTE

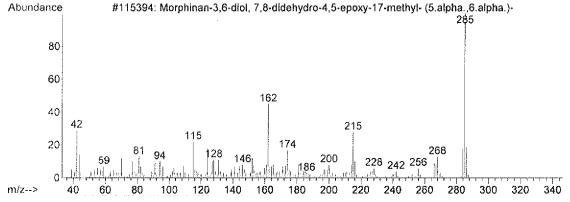
Search Libraries:

Minimum Quality: 80 C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L

PK#	RT	Library/ID		CAS#	Qual
2	5.61	C:\Database\NIST05a.	 L		
		Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99
		Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99
		Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99





File Name : F:\Q1-2011\System7\02\_15\_11\771910.D

Operator : KAC

Date Acquired Sample Name Submitted by 15 Feb 2011 10.41

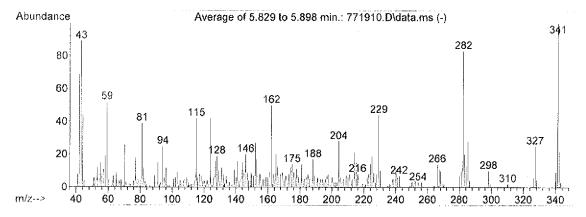
Vial Number . To AcquisitionMeth: DRUGS.M Integrator : RTE

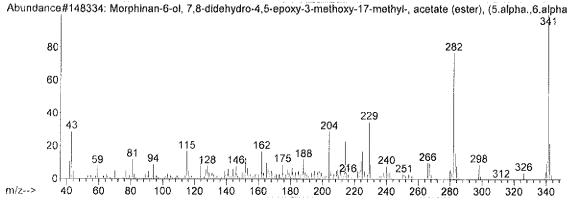
Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

PK#	RT	Library/ID		CAS#	Qual
3	5.87	C:\Database\NIST			
			7,8-didehydro-4,5-e		99
		Morphinan-6-ol,	7,8-didehydro-4,5-e	006703-27-1	99
		Acetylcodein		1000153-00-2	95





File Name : F:\Q1-2011\System7\02 15 11\771910.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:41

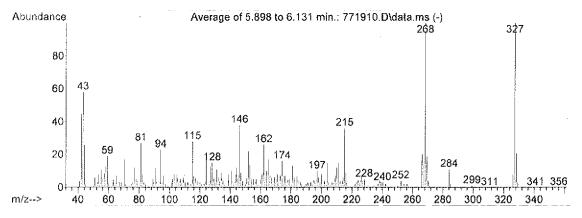
Sample Name : Submitted by : ASD Vial Number : 10

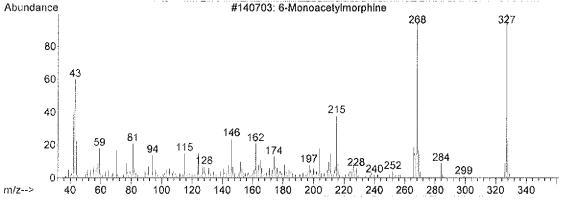
Vial Number : 10 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

C:\Database\SLI.L Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

PK#	RT	Library/ID	CAS#	Qual
4	5.95	C:\Database\NIST05a.L 6-Monoacetylmorphine	002784-73-8	99
		6-Monoacetylmorphine	002784-73-8	99
		6-Monoacetylmorphine	002784-73-8	99





File Name : F:\Q1-2011\System7\02\_15\_11\771910.D

Operator : KAC

: 15 Feb 2011 10:41 Date Acquired

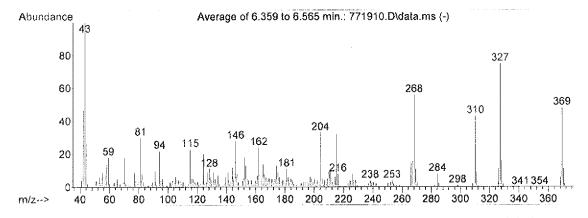
Sample Name Submitted by

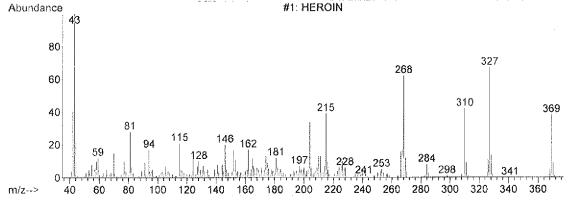
Vial Number 10 : AcquisitionMeth: DRUGS.M : RTE Integrator

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

PK#	RT	Library/ID	CAS#	Qual
5	6.41	C:\Database\SLI.L	000561-27-3	99
		HEROIN JWH-073	208987-48-8	2





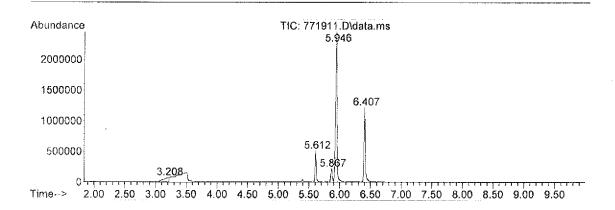
File Name : F:\Q1-2011\System7\02 15 11\771911.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:54

Sample Name

Submitted by : ASD Vial Number : 11 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
3.208	404964	5.32	9.62	
5.612	713169	9.37	16.94	
5,867	351629	4.62	8.35	
5.946	4210108	55.33	100.00	
6.407	1928628	25.35	45.81	

File Name : F:\Q1-2011\System7\02 15 11\771911.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:54 Sample Name :

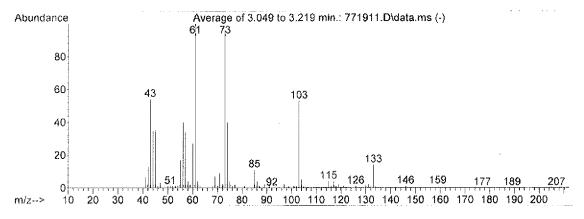
Submitted by : ASD Vial Number : 11 AcquisitionMeth: DRUGS.M Integrator : RTE

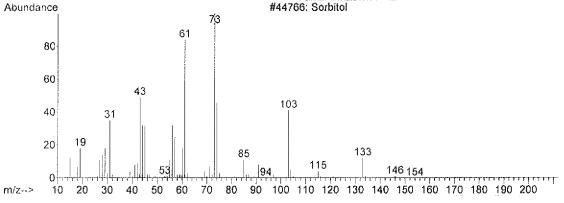
Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

 PK#	RT	Library/ID	CAS#	Qual
 Ţ.	3.21	C:\Database\NIST05a.L Sorbitol Sorbitol D-Mannitol	000050-70-4 000050-70-4 000069-65-8	87 86 83





File Name : F:\Q1-2011\System7\02 15 11\771911.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:54

Sample Name :

Submitted by : ASD
Vial Number : 11
AcquisitionMeth: DRUGS.M
Integrator : RTE

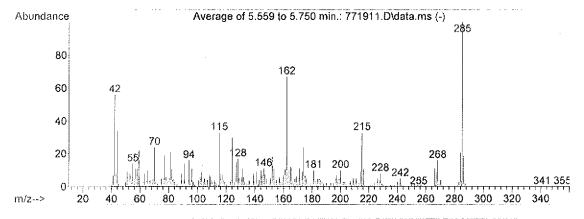
Search Libraries: C:\Database\SLI.L

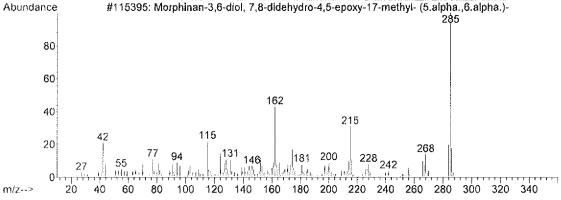
Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80

PK#	RT	Library/ID		CAS#	Qual
2	5.61	C:\Database\NIST05a.	L		
		Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99
		Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99
		Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99





: F:\Q1-2011\System7\02\_15\_11\771911.D File Name

Operator : KAC

Date Acquired 10:54

Sample Name Submitted by

11

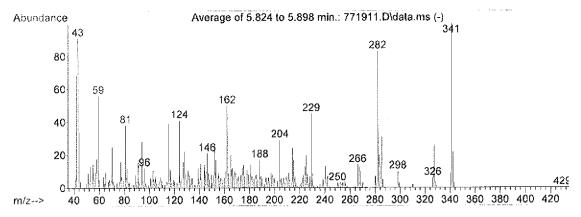
Vial Number AcquisitionMeth: DRUGS.M Integrator : RTE

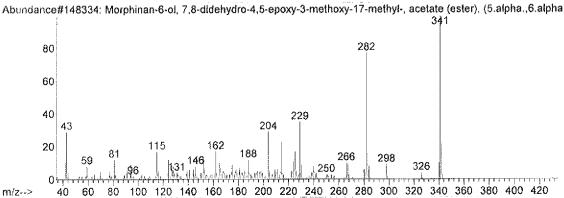
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW TOX2.L

PK# CAS# Qual RT Library/ID 5.87 C:\Database\NIST05a.L 3 Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 99 96 1000153-00-2 95 Acetylcodein





File Name : F:\Q1-2011\System7\02\_15\_11\771911.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:54

Sample Name

Submitted by : ASD Vial Number : 11

AcquisitionMeth: DRUGS.M Integrator : RTE

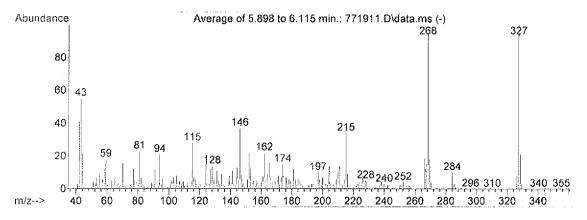
Search Libraries:

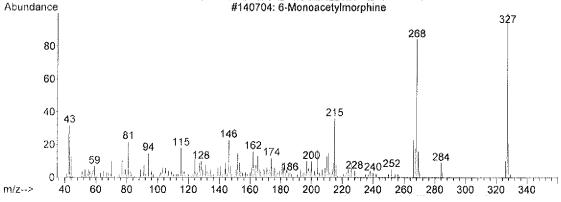
C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

	PK# RT Library/ID		CAS#	Qual	
4 5.95	5.95	C:\Database\NIST05a.L			
			6-Monoacetylmorphine	002784-73-8	99
			6-Monoacetylmorphine	002784-73-8	99
			6-Monoacetvlmorphine	002784~73~8	99





File Name : F:\Q1-2011\System7\02\_15\_11\771911.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:54

Sample Name

Submitted by

Vial Number ; 11, AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

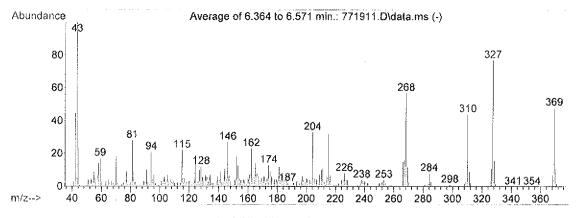
JWH-073

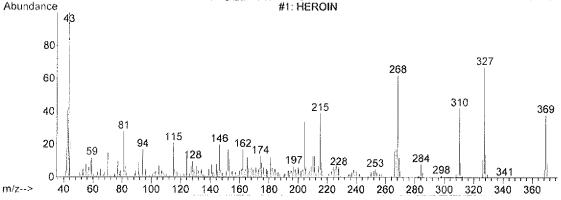
Minimum Quality: 80 Minimum Quality: 80

208987-48-8

C:\Database\NIST05a.L

PK#	RT	Library/ID	CAS#	Qual
5	6.41	C:\Database\SLI.L HEROIN	000561-27-3	99





File Name : F:\Q1-2011\System7\02 15 11\771922.D

: KAC Operator

Date Acquired : 15 Feb 2011 13:12

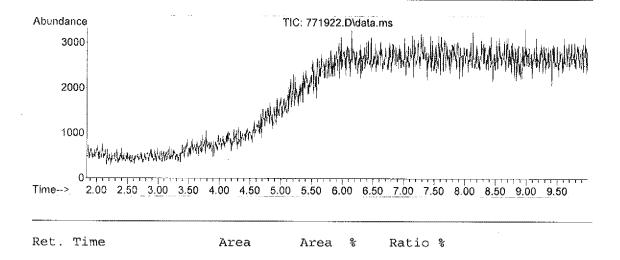
Sample Name : BLANK

Submitted by

Vial Number

AcquisitionMeth: DRUGS.M

Integrator : RTE



\*\*\*NO INTEGRATED PEAKS\*\*\*

File Name : F:\Q1-2011\System7\02\_15\_11\771923.D

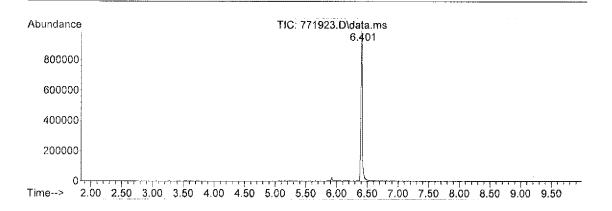
Operator : KAC

Date Acquired : 15 Feb 2011 13:25

Sample Name : HEROIN STD

Submitted by

Vial Number : 23 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.401	1598308	100.00	100.00

File Name :  $F:\Q1-2011\System7\02_15_11\771923.D$ 

Operator : KAC

: 15 Feb 2011 Date Acquired 13:25

Sample Name : HEROIN STD

Submitted by

Vial Number 23 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI,L

Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

PK# RT Library/ID CAS# Qual

1 6.40 C:\Database\SLI.L

HEROIN

000561-27-3 99

Average of 6.359 to 6.560 min.: 771923.D\data.ms (-) Abundance 80 327 60 268 369 310 40 215 146 115 162 94 20 59 28 228 241 253 298 100 140 m/z--> 60 80 120 160 180 200 220 240 260 280 300 320 340 360

